

only example we have seen from the Guianas. The centre of the thorax and base of abdomen above are darker than in Venezuelan individuals; the inner border of the central line of the forewing is paler, being almost pure white near the base; the band of the hindwing is much shaded with fuscous.

The outer spur of the midtibia is shorter than the inner one.

7. *Xylophanes amadis meridanus* subsp. nov.

Xylophanes amadis amadis, Rothschild & Jordan (nec Stoll, 1782), *Revision of Sphingidae*, l.c. t. 9, fig. 15 (1903) (partim; Mérida).

♂ ♀. The form figured l.c. may be named as above. The outer spur of the midtibia is longer than, or as long as, the inner one.

A series from Mérida, Venezuela.

A NEW SPECIES OF THE DIPTEROUS GENUS *ACHILIS* FABR. (FAMILY ORTALIDAE).

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Achias rothschildi sp. nov. (Plate XV., figs. 5-9).

♂ ♀. ♂.—Length (five specimens) 13.5 to 16 mm.; length of eye-stalk, measured from base of stalk to inner margin of eye (five specimens) 8.5 to 25.6 mm.; width of head across occiput immediately below base of eye-stalks 4 to 5 mm.; length of wing 14 to 16.6 mm.

♀.—Length (two specimens) 14.5 mm.; width of head across vertex, including eyes, 7 to 7.6 mm.; length of wing 16 to 16.5 mm.

Resembling *Achias longiridens* Walk. and *A. latiridens* Walk. in coloration and markings of body and wings; distinguished from both by the femora being without sharply marked dark tips (though the distal extremities of the front and middle femora in the ♂ and of the front femora in the ♀ usually exhibit a dark longitudinal streak above), by the presence of a well-marked pale band (interrupted on the upper side) on the tibiae, and by the great development of the callosity on the inner side of the tips of the hind tibiae.

Head.—Front orange-ochraceous,* more or less irregularly and finely mottled with clove-brown; face and jowls ochre-yellow or buff-yellow, antennal cavities dark brown or brownish, a clove-brown streak on each side, running from base of eye-stalk in ♂ and from lower margin of eye in ♀ nearly to lower margin of jawl, and a similar but usually somewhat broader mark extending from bottom of inner margin of each antennal cavity to edge of buccal cavity; occiput buff-yellow above,

* For names and illustrations of colours, see Ridgway, *A Nomenclature of Colors for Naturalists* (Boston: Little, Brown & Co., 1886).

maize-yellow below, with a more or less distinct, clove-brown, transverse mark between bases of eye-stalks in ♂ or eye-processes in ♀; **palpi** ochraceous-buff, clothed with dark brown or blackish hairs; **antennae**, including arista and its hairs, dark brown, extreme base of arista, first joint and bases of second and third joints of antennae paler (buff or ochraceous-buff).

Thorax.—Dorsum dull metallic greenish bronze (sometimes with traces of a purplish tinge anteriorly), obscured by a coat of dull yellowish olivaceous pollen, and marked by a series of black longitudinal stripes as shown on Plate XV., figs. 5-9; pleurae and pectus buff or ochraceous-buff, covered with greyish pollen, pleurae obscurely mottled with dark brown; dorsum clothed with very short and fine appressed black hair, much closer on black stripes than elsewhere, postero-lateral and posterior borders clothed with short ochre-yellow hair; viewed under a platyscopic lens the dorsum has a somewhat coarsely punctured appearance; **scutellum** shining metallic dark bronze-green, with a velvety patch of exceedingly minute, pale yellow hairs on each side of base above.

Abdomen.—Dorsum shining metallic bronze-green (occasionally bronze-brown), basal angles of first segment more or less ochraceous-buff; surface of dorsum clothed with closely set, appressed, shining, ochre-yellow hair; basal angles with longer ochre-yellow hair, fourth segment and hind border of third segment in ♀ clothed with dark brown hair; apex of fourth segment in ♂ for most part also usually clothed with dark brown hair.

Wings hyaline, with a faint yellowish tinge, and with darker markings as shown in figures 5-9 (Plate XV.); small transverse vein and base of third longitudinal vein suffused with clove-brown, second longitudinal vein immediately above small transverse vein and distal extremity of first longitudinal vein also suffused with clove-brown; second costal cell and marginal and submarginal cells on either side of blotch above small transverse vein tinged with ochre-yellow; apex of wing from level of posterior transverse vein suffused with sepia-brown, which extends along hind border, becoming fainter in third posterior cell, and in apex of wing itself is usually darker on distal extremities of second, third, and fourth longitudinal veins, and on posterior transverse vein. (In one specimen the brown colour on the distal portion of the second longitudinal vein is so much intensified that this vein has a continuous dark brown border from the blotch above the small transverse vein to the costa, the border being broader from the level of the posterior transverse vein onwards).

Halteres.—Knobs dark brown, stalks cream-buff, or buff.

Legs orange-buff; femora marked as stated in diagnosis, front femora also with an ochraceous patch on inner side at tip, below which they bear a double row of stout black spines; tarsi and tibiae clove-brown, tibiae marked in middle with a conspicuous, interrupted, ochraceous band, as stated in diagnosis; callosity on inner side of tips of hind tibiae clove-brown; tarsi clothed on under side with short, closely set, shining orange ochraceous hair.

New Guinea: Type of ♂, three additional ♂♂, and one ♀ from Stephansort, German New Guinea; a second ♀ and a fifth ♂ from Milne Bay, British New Guinea, February, 1899 (A. S. Meek).

Types, with three ♂ paratypes, in the Tring Museum.

The Hon. Walter Rothschild, in whose honour I have much pleasure in naming this striking species, has kindly presented paratypes of both sexes to the British Museum (Natural History).

PLATE XV.

1. *Rhaphiorhynchus rothschildi* Austen, ♂ (type).*
2. *Pepsis elevata* Fabr.*
3. " *heros* Fabr.*
4. *Mydas praegrandis* Austen, ♀ (type).*
5. *Achias rothschildi* sp. nov., ♀.
6. " " " " ♂.
7. " " " " "
8. " " " " "
9. " " " " " (type).

All figures are natural size.

NOTE.—The type (♂) and the other three males and female of *Achias rothschildi* from Stephansort were collected by the late Herr Wahnes.

The *Rhaphiorhynchus* and *Mydas* were collected by José Steinbach in Bolivia. The two *Pepsis* are figured because they are the "models" mimicked by the *Rhaphiorhynchus* and the *Mydas* respectively. A full knowledge of the life-history of these two remarkable *Diptera* can alone determine whether this is a case of "protective" or of "aggressive" mimicry.

The four males of the *Achias* are figured to illustrate the very great difference in the development of the eye-stalks.

WALTER ROTHSCHILD.

* See Ernest E. Austen, "Two Remarkable New Species of *Diptera*," *Nor. Zool.* May 1909, vol. xvi, pp. 129 131.
